

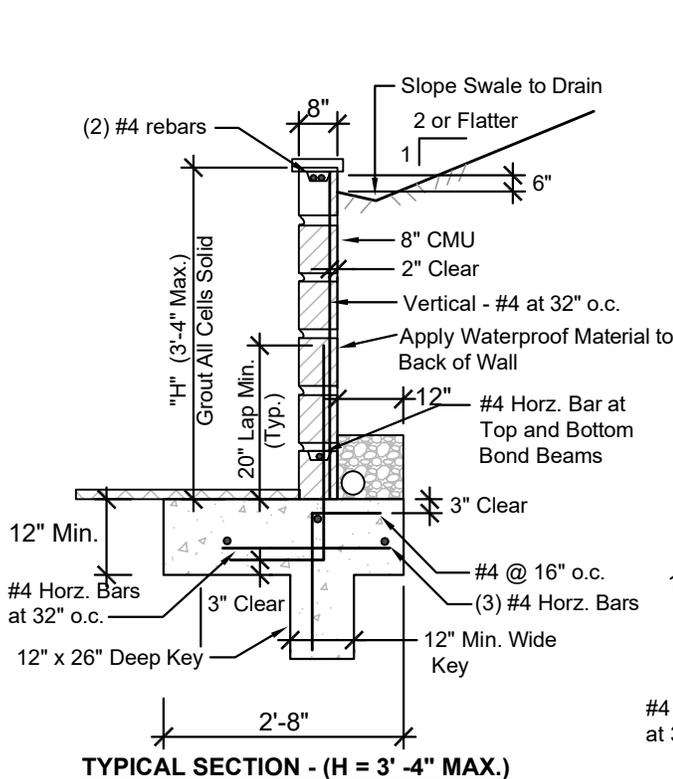


CITY OF SANTA CLARITA

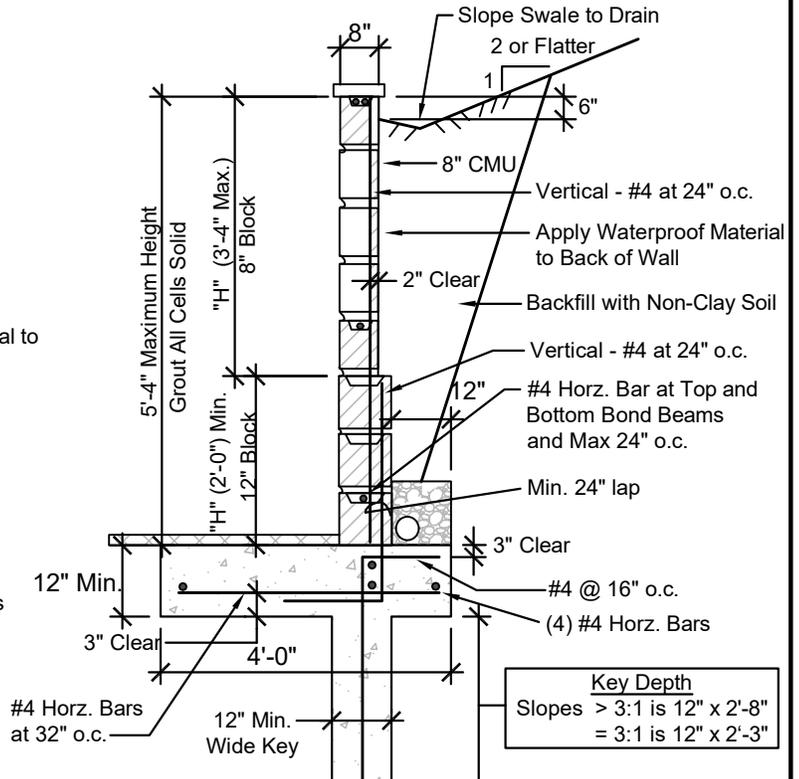
BUILDING & SAFETY DIVISION
 23920 Valencia Boulevard, Suite 140
 Santa Clarita, CA 91355 (661) 255-4935

Concrete Block Retaining Wall

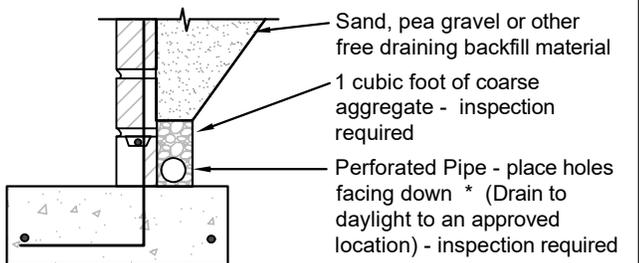
(The following information is not meant to replace a complete set of plans. Information shown on plans must reflect field conditions.)



TYPICAL SECTION - (H = 3' -4" MAX.)



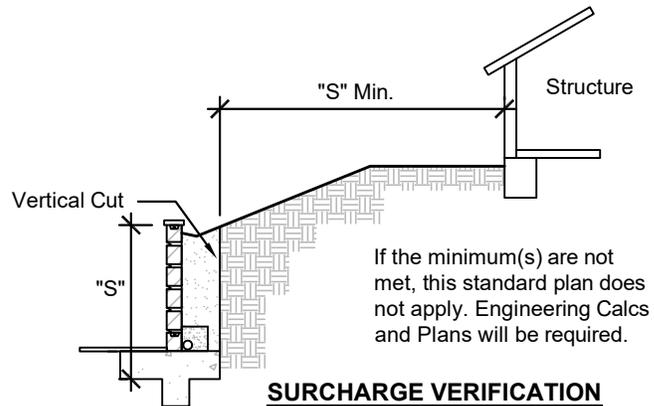
TYPICAL SECTION - (H = 5' -4" MAX.)



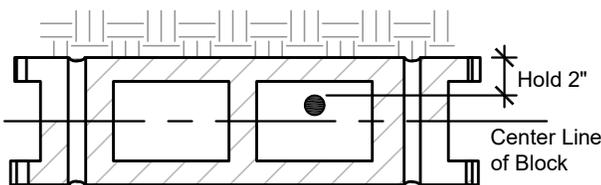
* (OR) Drain Option: to leave out every third head joint on the first course - not allowed if drainage will be onto a walking surface or adjacent property.

TYPICAL SECTION - (Drainage Detail)

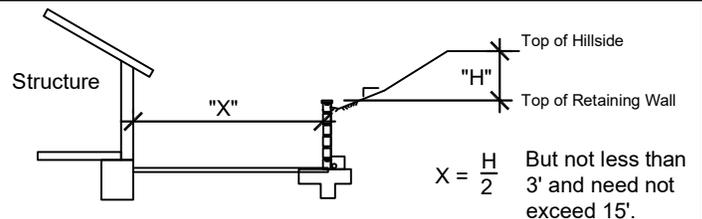
(Parts of the Retaining Wall are not shown for clarity)



SURCHARGE VERIFICATION



TYPICAL SECTION - (Rebar Location)



SLOPE SETBACK TO STRUCTURE

Specifications For Block Retaining Wall

(The following information is not meant to replace a complete set of plans. Information shown on plans must reflect field conditions.)

CONCRETE

1. All concrete shall conform to the latest edition of the State Building Code.
2. All cement shall conform to ASTM-C-150, Type I or II. Use Type V cement, for soil containing sulfates.
3. Fine and coarse aggregate shall conform to ASTM C-33 for standard weight concrete.
4. All aggregate shall be comparable to "San Gabriel Valley" aggregate. The shrinkage shall be as per ASTM C-157 with the average drying shrinkage at 28-days not exceeding 0.04%.
5. Concrete shall be cured by keeping continuously wet for 10-days or by an approved curing compound.
6. Strength of concrete shall be a minimum of $F'c=2,500$ psi. When exposed to sulfates, concrete strength shall be $F'c=4,500$ psi.

REINFORCEMENT

1. All reinforcing shall be ASTM A-615-40 for #4 bars and smaller. All reinforcing shall be ASTM A-615-60 for #5 bars and larger.
2. All bars shall be clean of loose flaky rust, grease or other materials likely to impair bond.
3. All bends shall be made cold.
4. Splicing of bars shall have a lap of 30 diameters or 2'-0" min. in all continuous reinforcement of footings. Masonry reinforcement shall have a lap of 40 diameters or 2'-0" min., whichever is greater.
5. All reinforcing bars shall be accurately and securely placed before pouring concrete.
6. Concrete protection for reinforcement shall be at least 3" to earth when the concrete is poured against the earth, 2" if poured against a form.

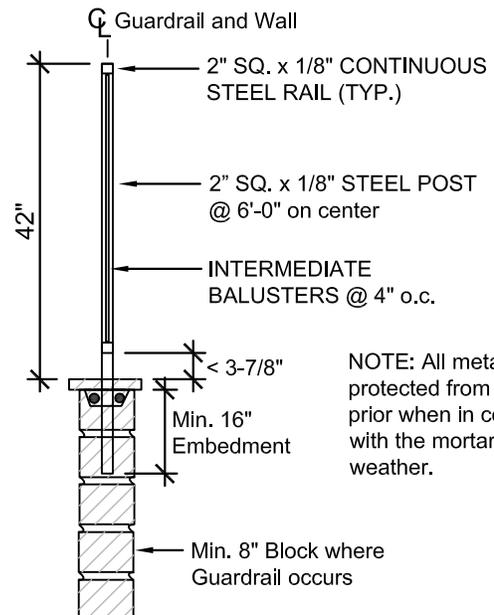
MASONRY

1. All masonry work shall conform to the latest edition of the State Building Code.
2. Concrete block shall be of sizes shown on drawings and conform to ASTM C90 & ASTM C140, 1,900 psi, Grade "N", Normal Weight Units with maximum linear shrinkage of 0.06%, $F'm=1,500$ psi grouted reinforced cells.
3. Mortar (ASTM C270) mix shall be composed of one part portland cement and three parts sand and not less than $\frac{1}{4}$ part nor more than $\frac{1}{2}$ part lime putty for Type "S" mortar. Minimum compression strength to be $F'c=2,000$ psi.
4. Grout (ASTM C476) mix shall be composed of one part portland cement to three parts max sand and not less than two parts pea gravel. Max grout lift of 4'-0". Special inspection shall be requested for high lift grouting. Minimum compression strength to be $F'c=2,000$ psi.
5. Provide cleanout openings at bottom of all vertically grouted cells if grout lift exceeds 4'-0".

6. All reinforcing shall have a minimum coverage of $\frac{1}{2}$ " grout.
7. Bolts shall be grouted with 1" of grout between bolt and masonry.
8. No pipes or ducts shall be placed in masonry walls unless specifically noted or detailed.
9. Dowels in concrete for masonry walls shall be the same size and spacing as masonry wall reinforcing.
10. All masonry, shall be reinforced grouted masonry, grout solid all cells.
11. All vertical reinforcing in masonry walls not retaining earth shall be located in the center of the wall, UNO.
12. Reinforcing shall be securely held and braced in place to prevent movement while placing masonry, concrete and grout.
13. Masonry to have special inspection per Section 1702 of the UBC when specified.

INSPECTION INFORMATION:

First inspection to be after trenches are ready for concrete and all required steel is tied in place. Second inspection at mid-height of wall prior to lower half grout. Third inspection at top grade beam prior to upper half grout. Final inspection to verify the work is completed including subdrain. Do not backfill wall for a minimum of 7 days after upper lift is grouted.



STEEL GUARDRAIL DETAIL